REMARKS

In response to the Office Action dated June 19, 2002, claims 1, 2, 13 and 18 have been amended. Claims 19-34 have been added. Therefore, claims 1-34 are now in the case. Reexamination and reconsideration of the amended application are requested.

Section 102(e) Rejections

The Office Action rejected claims 1-4 and 6-18 under 35 U.S.C. § 102(e) as being anticipated by Maritzen et al. (U.S. Patent No. 5,870,719). The Office Action stated that Maritzen et al. disclose nearly all the elements of the Applicants' claimed invention except for preventing sub-item conflicts using the transmitted rules of enforcement. However, the Office Action further stated that it would have been inherent to a method such as Maritzen et al. so as to allow the system to process transmitted results transparently to users and display sub-items in combination logically and properly, especially when they are mutually exclusive of each other.

In response, the Applicants have amended claims 1, 2, 13, and 18 to more clearly distinguish the Applicants' claimed invention. The Applicants, therefore, respectfully traverse this rejection based on the amendments to the claims and the following arguments.

Amended independent claim 1 of the Applicants' invention includes a method for dynamically displaying data values on a client computer. The method includes receiving transmitted results, sub-items associated with the results, and rules of enforcement of sub-item combinations. This data is received in a predefined format through a communications interface in response to a request from the client. The method also includes displaying a first set of results on a client display device. Additionally, the method includes processing the results in real time using the client computer in response to user adjustment of the results and sub-item configuration on the client computer. The method also includes preventing a user from creating and encountering sub-item conflicts using the transmitted rules of enforcement. The method also includes dynamically displaying the processed results on the client display device.

Preventing a user from creating and encountering sub-item conflicts using the transmitted rules of enforcement avoids having the server be unnecessarily reaccessed numerous times (specification, page 3, lines 11-13). This prevention begins as a host computer or server collects and processes data to produce results having associated sub-items in response to a request for information from a client (specification, page 13, lines 16-19; FIG. 3). In response to this request, the server gathers and transmits to the client results, sub-items, and sub-item rules of enforcement (specification, page 15, lines 4-6). These transmitted rules of enforcement of sub-item combinations contain "all potential configurable conflicts between sub-items to thereby prevent the user from creating any sub-item conflicts during adjustment of the sub-items" (specification, page 20, lines 4-7; emphasis added). The sub-item conflicts can occur when the user is interacting with results and associated sub-items using, for example, graphical user interface tools (specification, page 20, lines 1-4). For each of the sub-items (or subset of data), "all potential conflicts between sub-items can be automatically noted and prevented from being encountered by the client user" (specification, page 21, lines 13-17).

In contrast, Maritzen et al. do not prevent a user from creating and encountering sub-item conflicts using rules of enforcement transmitted from a server to a client. This is because the system of Maritzen et al. keeps the rules on the server and must constantly access the server. Thus, in Maritzen et al., a user is allowed to create and encounter conflicts between sub-items and these conflicts must be validated as conflicts by accessing the server.

In particular, as shown in FIG. 2 of Maritzen et al., a client module 220 is in communication with a JAVA server 240. Additionally, the JAVA server 240 contains a quote configuration system 210. The quote configuration system 210 includes a quote data and rules database 270. Referring to FIGS. 6 and 7 of Maritzen et al., "the user may iteratively select or edit the selections described in block 614-712" (col. 7, lines 67 to col. 8, lines 1-2). Blocks 614 to 712 contain such selections as quantities, cost for a quote, and type of service or coverage. As shown in FIG. 7 of Maritzen et al., after these selections

are made they are validated (box 714). Validation occurs using the rules database 270 by accessing the JAVA server 240 and the quote configuration system 210 located on the server 240. If a conflict exists, a business rule of the quote configuration system quote database "will indicate an invalid condition" (col. 8, lines 8-13). Pop-up screens indicating invalid conditions are displayed to the user once the user creates or encounters a conflict (col. 8, lines 14-18). The "JAVA server 240 and the quote configuration system 210 are in frequent communication" in order to validate the user's selections (col. 8, lines 19-21). In addition, a user can choose to purposely create a conflict using an override feature "and proceed with the quote anyway" (col. 8, lines 21-24).

The Applicants' specification discusses the problems with the types of systems disclosed in the Maritzen et al. reference. Specifically, systems such as Maritzen et al. submit a user selection of sub-items to the server for validation (specification, page 2, lines 5-7). If the selections are invalid, the server notifies the user that the selections are invalid and the user must make another selection (specification, page 2, lines 6-8). "This validation step is repeated until the remote user submits a valid sub-item configuration and sub-item selections without conflicts" (specification, page 2, lines 8-10).

One problem with allowing a user to create conflicts of sub-items, validating the conflicts, and having the user make a new selection of sub-items is that this causes "the server to be unnecessarily reaccessed numerous times" (specification, page 3, lines 9-13). In fact, the server is reaccessed "until there are no conflicts" (specification, page 3, lines 15-16). This causes systems (such as the system disclosed in Maritzen et al.) to be slow, not allow real time user interaction, and require undue processing (specification, page 3, lines 17-19). In contrast, the present invention overcomes these problems by preventing a user from ever creating or encountering sub-item conflicts.

Amended independent claim 2 includes a display device having rendered thereon dynamically changing results of a database query. The display device includes a set of results, criteria associated with the set of results, and rules of enforcement of the criteria being stored as information on a server. The information is transmitted from the server to

a remote client that made a request for the results for display on the client, and the information is transmitted as encoded data. The display device also includes at least one dynamic output and a least one adjustable interface option. The adjustable interface option is displayed on the client adapted to enable adjustment by the remote client of the associated criteria confined within the transmitted rules of enforcement. This causes the dynamic output to change in real time such that potential configurable conflicts between the associated criteria are prevented.

Conversely, as noted above, Maritzen et al. do not prevent potential configurable conflicts. Quite the opposite, Maritzen et al. actually allow a user to make conflicting choices and selections. Each selection then is validated by accessing the server. If the selection is invalid, the user is invited to make a different selection. The new selection then is validated again by the server. This process is repeated until a valid selection is made or the user overrides the validation process. Thus, in contrast to the Applicants' claimed invention that prevents conflicts between the associated criteria, Maritzen et al. expressly allows conflicts to be made.

Amended independent claim 13 includes a method for dynamically displaying pricing data on a client display device. This method includes establishing a communications interface between a client and a server, requesting pricing data from the client to the server for at least one object, generating pricing data with associated options and rules for selection and combination of the associated options for each object at the server. The method also includes transmitting the pricing data, associated options, and rules for selection and combination of the associated options from the server to the client, displaying a first set of pricing results on the client display device, and providing a user interface on the client display device for user interaction with the pricing data and selection and combination of the associated options. The method further includes using the rules for selection and combination of the associate options to prevent a user from encountering a conflict during the user interaction with the pricing data. The method also includes dynamically updating the pricing data using the client computer to process the update and displaying the pricing data on the client display device in response to user interaction with

the pricing data and associated options, and rules for selection and combination.

In contrast, Maritzen et al. do not prevent a user from encountering conflicts during interaction with pricing data. As discussed above, the system of Maritzen et al. allows a user to encounter a conflict and then must access the server before the system is aware that a conflict exists. Once the conflict is discovered, the user can either make another selection or choose to override the conflict and proceed anyway. Thus, the system of Maritzen et al. is very different from the Applicants' claimed invention, which prevents a user from even encountering a conflict during user interaction.

Amended independent claim 18 includes a method for enforcing valid combinations of data using a server computer. This method includes receiving a request from a remote computer and transmitting results, sub-items associated with the results, and rules of enforcement of sub-item combinations in a predefined format from the server to the remote computer in response to the request. Processing of the transmitted results is performed in real time in response to a user adjustment of the transmitted results and sub-items associated with the transmitted results. The method further includes preventing a user of the remote computer from creating and encountering conflicts between sub-items during user adjustment of the sub-items by using the rules of enforcement. The rules of enforcement contain potential configurable conflicts between the sub-items.

In contrast, Maritzen et al. do not prevent a user from creating and encountering sub-item conflicts during user adjustment of the sub-items by using the rules of enforcement. As noted above, Maritzen et al. allow a user to create and encounter conflicts between sub-items. The user is not made aware of the conflicts until the user adjustment is validated by the server. Once the conflict has been encountered and validated by the server, the user still has the option of overriding the conflict warning and proceeding ahead with conflicting sub-items. On the other hand, the Applicants' claimed invention prevents a user from creating and encountering any conflicts between sub-items.

Because the Applicants' claimed invention includes features neither taught nor disclosed by Maritzen et al., the Applicants respectfully submit that the rejections of independent claims 1, 2, 13, and 18 under 35 U.S.C. § 102(e) as being anticipated by Maritzen et al. have been overcome. Moreover, rejected claims 3 and 4 depend from independent claim 2, rejected claims 6-12 depend from independent claim 1, and rejected claims 14-17 depend from independent claim 13 and are therefore also novel over Maritzen et al. (MPEP § 2143.03). The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claims 1-4 and 6-18 under 35 U.S.C. § 102(e) based on the amendments and arguments above.

Section 103(a) Rejections

The Office Action rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Maritzen et al.. The Office Action contended that Maritzen et al. disclose all elements of the Applicants' claimed invention except for disclosing the interface tools to include dynamically coupled check boxes so that designated check boxes dynamically change as a user configures conflicting interface tools constrained by the logical rules of enforcement. However, the Office Notice was given that this feature is well known in the art. Thus, the Office Action maintained that it would have been obvious to one of ordinary skill in the art at the time of the invention to include this feature in the Maritzen et al. interface tools in order to aid and visually facilitate user interaction with a constrained set of decision variables.

In response, the Applicants respectfully traverse this rejection based on the amendments to claim 2 and the arguments above and below. In particular, Maritzen et al. do not disclose, suggest or provide any motivation for at least one claimed feature of the Applicants' claimed invention. Further, Maritzen et al. fail to appreciate advantages of this claimed feature.

To make a prima facie showing of obviousness, all of the claimed features of an Applicant's invention must be considered, especially when they are missing from the prior art. If a claimed feature is not taught in the prior art and has advantages not appreciated

by the prior art, then no prima facie showing of obviousness has been made. The Federal Circuit Court has held that it was an error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein. *In re Fine,* 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Moreover, if the prior art references do not disclose, suggest or provide any motivation for at least one claimed feature of an Applicant's invention then a prima facie case of obviousness has not been established (MPEP § 2142).

As discussed above, amended independent claim 2 includes a display device having rendered thereon dynamically changing results of a database query. The display device includes a set of results, criteria associated with the set of results, and rules of enforcement of the criteria being stored as information on a server. The information is transmitted from the server to a remote client that made a request for the results for display on the client, and the information is transmitted as encoded data. The display device also includes at least one dynamic output and a least one adjustable interface option. The adjustable interface option is displayed on the client adapted to enable adjustment by the remote client of the associated criteria confined within the transmitted rules of enforcement. This causes the dynamic output to change in real time such that potential configurable conflicts between the associated criteria are prevented. In contrast, Maritzen et al. do not prevent potential configurable conflicts. In fact, Maritzen et al. expressly allow a user to make conflicting choices and selections.

In addition, Maritzen et al. fail to provide any motivation, suggestion or desirability to modify their system to prevent sub-items conflicts. One reason for this is that the system of Maritzen et al. must be able to continually access the server to determine if there even is a conflict. Absent any type of motivation or suggestion, therefore, Maritzen et al. cannot render the Applicants' claimed invention obvious (MPEP § 2143.01).

Maritzen et al. also fail to appreciate or recognize the advantages of the Applicants' claimed feature of preventing potential configurable conflicts between the associated

criteria. More specifically, this feature avoids repeated accessing of the server (specification, page 3, lines 11-13). Frequent accessing of the server causes the system disclosed in Maritzen et al. to be slow, to not allow real time user interaction, and to require undue processing (specification, page 3, lines 17-19). The Applicants' claimed feature of preventing potential configurable conflicts between the associated criteria overcomes these problems and allows real-time processing and adjustment by a user of the sub-items. Maritzen et al. simply do not recognize these advantages.

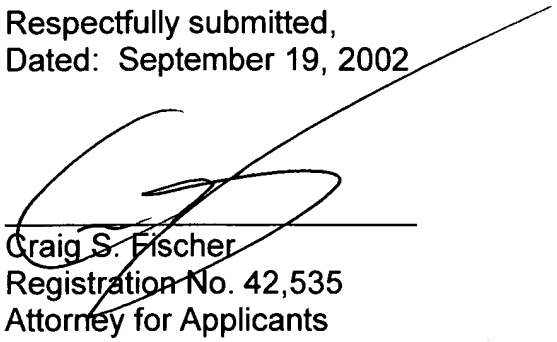
The Applicants, therefore, submit that obviousness cannot be established since Maritzen et al. do not disclose, suggest or provide any motivation for the Applicants' claimed feature of preventing potential configurable conflicts between the associated criteria. In addition, Maritzen et al. fail to appreciate advantages of this claimed feature. Therefore, as set forth in *In re Fine* and MPEP § 2142, Maritzen et al. cannot render the Applicants' claimed invention obvious because the reference is missing at least one material feature of the Applicants' claimed invention. Consequently, because a prima facie case of obviousness cannot be established due to the lack of "some teaching, suggestion, or incentive supporting the combination", the rejection must be withdrawn. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); MPEP 2143.01.

Accordingly, the Applicants respectfully submit that independent claim 2 is patentable under 35 U.S.C. § 103(a) over Maritzen et al. based the amendments to claim 2 and the arguments set forth above and below. Moreover, claim 5 depends from independent claim 2 and is also nonobvious over Maritzen et al. (MPEP § 2143.03). The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claim 5.

In view of the arguments and amendments set forth above, the Applicants submit that claims 1-18 of the subject application are in immediate condition for allowance. The Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue.

In an effort to expedite and further the prosecution of the subject application, the Applicants kindly invite the Examiner to telephone the Applicants' attorney at (805) 278-8855 if the Examiner has any comments, questions or concerns.

Respectfully submitted,
Dated: September 19, 2002



Craig S. Fischer
Registration No. 42,535
Attorney for Applicants

LYON & HARR, L.L.P.
300 East Esplanade Drive, Suite 800
Oxnard, CA 93036-1274
Tel: (805) 278-8855
Fax: (805) 278-8064

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Following are marked-up versions of amended claims 1, 2, 13 and 18:

1. (Five Times Amended) A method for dynamically displaying data values on a client computer, comprising:

receiving transmitted results, sub-items associated with the results, and rules of enforcement of sub-item combinations in a predefined format through a communications interface in response to a request from the client;

displaying a first set of results on a client display device;

processing the results in real time using the client computer in response to user adjustment of the results and sub-item configuration on the client computer;

preventing a user from creating and encountering sub-item conflicts using the transmitted rules of enforcement; and

dynamically displaying the processed results on the client display device.

2. (Four Times Amended) A display device having rendered thereon dynamically changing results of a database query, comprising

a set of results, criteria associated with the set of results, and rules of enforcement of the criteria being stored as information on a server, wherein the information is transmitted from the server to a remote client that made a request for the results for display on the client, the information being transmitted as encoded data;

at least one dynamic output; and

at least one adjustable interface option displayed on the client adapted to enable adjustment by the remote client of the associated criteria confined within the transmitted rules of enforcement for causing the dynamic output to change in real time such that potential configurable conflicts between the associated criteria are prevented.

13. (Thrice Amended) A method for dynamically displaying pricing data on a client display device comprising:

establishing a communications interface between a client computer and a server computer;

requesting pricing data from the client to the server for at least one object;

generating pricing data with associated options and rules for selection and combination of the associated options for each object at the server;

transmitting the pricing data, associated options, and rules for selection and combination of the associated options from the server to the client;

displaying a first set of pricing results on the client display device;

providing a user interface on the client display device for user interaction with the pricing data and selection and combination of the associated options;

using the rules to prevent a user from encountering a conflict during the user interaction with the pricing data; and

dynamically updating the pricing data using the client computer to process the update and displaying the pricing data on the client display device in response to user interaction with the pricing data and associated options, and rules for selection and combination.

18. (Once Amended) A method for enforcing valid combinations of data using a server computer, comprising:

receiving a request from a remote computer; and

transmitting results, sub-items associated with the results, and rules of enforcement of sub-item combinations in a predefined format from the server to the remote computer in response to the request, wherein processing of the transmitted results is performed in real time in response to a user adjustment of the transmitted results and sub-items associated with the transmitted results[, and wherein sub-item conflicts are prevented using the transmitted rules of enforcement of sub-item combinations] ; and

preventing a user of the remote computer from creating and encountering conflicts between sub-items during the user adjustment of the sub-items by using the rules of enforcement, wherein the rules of enforcement contain potential configurable conflicts between the sub-items.